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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,245	05/25/2001	Nanami Miki	450100-03244	4576

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EXAMINER
LAYE, JADE O

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 May 2001_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-22_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-22_ is/are rejected.

7) ☒ Claim(s) _2-10 and 12-22_ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _25 May 2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _2/27/02, 2/20/03_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 2/27/02 and 2/20/03 are in

compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the

information disclosure statements.

Claim Objections

Claims 2-10, 12-22 are objected to because of the following informalities:

    a.   "Claims" should not be capitalized within the body of claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1.   Claims 1, 2, 6, 11-13, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schein et al. (US #6,133,909).

Applicant's claim 1 recites an electronic programming guide (EPG) retrieval method comprising the steps of:

a.   using a retrieval keyword to access an EPG database

b.   extracting information relevant to entered keyword from a dictionary database

c.   and, extracting EPG data based upon the extracted information relevant to the entered keyword

As to claim 1, Schein discloses a method of searching an EPG database (Col. 1, Ln. 49-56), wherein, via an interface, a user can enter certain attributes (i.e., keywords) (Col. 2, Ln. 18-23), which retrieve information relevant to the entered keyword from the EPG database. (Col. 12, Ln. 66-67 thru Col. 13, Ln. 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data. (Col. 13, Ln. 33-48). It's inherent that a "dictionary database" must be contained within the system of Schein. Any system, which allows the user to enter keywords used to retrieve relevant information from the system, must contain a database containing said relevant information. Accordingly, each and every limitation of applicant's claim 1 has been anticipated by Schein.

Claim 11 is an apparatus claim corresponding to the method claim 1, and is analyzed and rejected as previously discussed.

As to claim 2, Schein discloses a method in which the EPG system database stores information relevant to television programs, such as movie titles and directors. (Col. 13, Ln. 33-36). The user can access this information by entering relevant characters or words, which correspond to the desired program to be located. (Col. 13, Ln. 36-48). Therefore, it is inherent that said database contain keywords and words relevant to those keywords, in order to match corresponding terms in response to a user request. Accordingly, each and every limitation of applicant's claim 2 has been anticipated by Schein.

As to claim 6, Schein discloses a method wherein the retrieval keywords and the relevant-keyword information extracted from the database are interrelated to each other. (Col. 13, Ln. 1-20 & 33-48). Accordingly, each and every limitation of claim 6 is anticipated by Schein.

As to claim 12, Schein's system contains a database, which could be located in the set-top box, television, or the like (i.e., client side). (Col. 9, Ln. 21-36). Accordingly, each and every limitation of claim 12 has been anticipated by Schein.

As to claim 13, Schein teaches a system containing a database, which could be accessed via the internet (i.e., data server side). (Col. 8, Ln. 62-67 thru Col. 9, Ln. 1-9). Accordingly, each and every limitation of claim 13 has been anticipated by Schein.

As to claim 19, Schein's EPG includes data relevant to movie information. (Fig. 10). Accordingly, each and every limitation of claim 19 is anticipated by Schein.

As to claim 20, Schein's EPG includes data relevant to drama information. (Col. 12, Ln. 17-20). Accordingly, each and every limitation of claim 20 is anticipated by Schein.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness
   or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2.   Claims 3, 8-10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Schein in view of Beach et al. (US Pub. #2003/0014753).

Applicant's claim 3 recites the EPG method of claim 1, wherein the retrieval keyword is

the name of a person and the relevant information extracted from the database is one of or a

combination of a nickname of said person, the full name of said person, the given name of said person, the name of a group relevant to said person, or another well-known name of said person. As discussed above under paragraph 1, Schein contains all limitations of claim 1, but fails to disclose a method, which performs the limitations of claim 3. However, within the same field of endeavor Beach discloses an EPG wherein a name could be used as a keyword (Fig. 5). Also, the system can be modified to search any program attribute which could be indexed. (Page 2, Par. [0019]). All of said "relevant-keyword information" listed in applicant's claim 3, could potentially be indexed within Beach's system. Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of Schein with the expanded indexing capability of Beach in order to provide a more extensive and flexible database from which the user could retrieve desired programming.

Applicant's claim 8 recites the EPG of claim 1, wherein the retrieval keyword belongs to a particular genre (category), while the relevant keyword information belongs to a different genre. As discussed above, Schein contains all limitations of claim 1, but fails to disclose the limitations of claim 8. However, within the same field of endeavor, Beach discloses a system in which a user can search an actor's name (genre of actor's names) and the system will retrieve all relevant information, which would include movies the actor appeared in (genre of movies). This, in essence, is a method of using a keyword from a certain genre, to retrieve relevant keyword information from a different genre. (Fig. 5 & 6; Page 2 Par. [0022]). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the genre teaching of Beach in order to provide the user with a more flexible searching tool.

Applicant's claim 9 recites the EPG of claim 8, where when the particular genre is relevant to cooking, while the different genre is relevant to cooks. As discussed above, the combined teachings of Schein and Beach contain all limitations of claim 8. Specifying the genre as relevant to cooking, while the retrieval keyword is relevant to cooks is an obvious variant of claim 8 (because cooks and cooking could be categorized as different genres under the same logic of claim 8's rejection). Thus, Schein and Beach contain all limitations of claim 9. (Moreover, cooks and cooking are interrelated and therefore could be analyzed and rejected as based upon the teaching of Schein used to reject claim 6. Except here, of course, Schein would have to be used in a 103 combination with Beach).

Applicant's claim 10 recites the EPG of claim 8, wherein the particular genre is relevant to place names, the different genre is relevant to one of or a combination of neighboring city names, country names, and regional names. As discussed above, the combined teachings of Schein and Beach contain all limitations of claim 8, but fail to specifically state the limitations recited in claim 10. However, claim 10 is an obvious variant of claim 8 because both claims are using a keyword from one genre to retrieve relevant keyword information from another genre. (In the alternative, the recited limitations are interrelated and thus, could be analyzed and rejected as in claim 6) Accordingly, the combined teachings of Schein and Beach contain all limitations of claim 10.

Applicant's claim 14 recites the EPG system of claim 11, wherein said client downloads and stores the program information. As discussed above, Schein contains all limitations of claim 11, but fails to teach whether the client is capable of downloading and storing program information. However, within the same field of endeavor, Beach further discloses the client unit

is capable of downloading and storing program information. (Page 1, Par. [0018]). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the client side downloading/storing capability of Beach in order to provide the client with an efficient method of storing EPG programming.

2.   Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Kanungo et al. (US #5,966,637).

Applicant's claim 4 recites the EPG method of claim 1, wherein the retrieval keywords and the relevant keyword information is written in hiragana and/or katakana characters used in Japanese writing. As discussed above, Schein contains all limitations of claim 1, but fails to disclose a system capable of displaying Japanese language characters. However, within the same field of endeavor, Kanungo discloses a system capable of displaying multilingual text on set top boxes (Col. 3, Ln. 54-62), and specifically discusses hiragana and katakana characters. (Col. 1, Ln. 49-58). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of Schein with the multilingual set-top box of Kanungo in order to provide the user with a system capable of searching and retrieving information via the Japanese language.

Claim 17 is an apparatus claim corresponding to the method claim 4, and is analyzed and rejected as previously discussed.

3.   Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Bohm et al. (US #5,404,507).

Applicant's claim 5 recites the method of claim 1, wherein when a misspelled retrieval keyword corresponds to a misused character keyword stored in the database, only the relevant-

keyword information is used to perform the retrieval. As discussed above under paragraph 1, Schein contains all limitations of claim 1, but fails to disclose the limitations of claim 5. However, within the same field of endeavor, Bohm (also cited in applicant's IDS) discloses a retrieval system capable of analyzing a misspelled search term. If the user misspells a search term, the system retrieves probable alternative words stored on the database and presents them to the user. The user then selects one of the alternative words in order to retrieve the original desired data. (Col. 2, Ln. 11-29). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of Schein with the database search capability of Bohm in order to provide a EPG searching method capable of retrieving desired programming based upon an incorrectly entered search term.

Claim 16 is an apparatus claim corresponding to the method claim 5, and is analyzed and rejected as previously discussed herein.

4.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of Beach and further in view of Livowsky. (US #6,598,039).

Applicant's claim 7 recites the EPG of claim 1, wherein when part of a retrieval keyword is entered, the entire keyword and the relevant-keyword information are retrieved from a database storing previously input keywords in a predetermined order. As discussed above, Schein contains all limitations of applicant's claim 1, but fails to specifically disclose the limitations of claim 7. However, within the same field of endeavor, Beach discloses an EPG system whereby the system can retrieve keywords and relevant keywords based only upon entering a single character (i.e. part of a keyword). (Fig. 4, and Page 2 Par. [0021]), but fails to disclose whether the system is capable of storing previously entered keywords in a

predetermined order. However, within the same field of endeavor, Livowsky discloses a method

of searching a database, whereby the database "learns" from a user's past entries (i.e., keywords)

and updates the database accordingly. (Col. 2, Ln. 26-33 ; Col. 8, Ln. 8-15). Therefore, it would

have been obvious to one ordinarily skilled in this art at the time of applicant's invention to

combine the modified teachings of Schein and Beach with the "learning" capability of

Livowsky's database in order to provide the user with a more expansive and flexible searching

tool, which would be capable of updating the database.

5.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of

Livowsky. (US #6,598,039).

Applicant's claim 15 recites the EPG system of claim 11, wherein the client access a

necessary part of the data server via a routing server, which stores route information for the data

server. As discussed above, Schein contains all limitations of applicant's claim 11, but fails to

disclose the additional limitations of claim 15. However, within the same field of endeavor,

Livowsky discloses a searching database wherein the user accesses the desired portion of the

system database (i.e., data server) via a system server, which distributes (i.e., routes) the search

requests among core engines. (Col. 2, Ln. 44-57 ; Col. 4, Ln. 1-12 & 30-36). Accordingly, it

would have been obvious to one of ordinary skill in this art at the time of applicant's invention to

combine the EPG of Schein with the multiple server system of Livowsky in order to provide a

more efficient searching system.

6.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein in view of

Lee et al. (US #6,463428).

Applicant's claim 18 recites the EPG system of claim 11, wherein said dictionary database stores previously input keywords so that the input keywords are included in the relevant-keyword information, and the stored keywords are arranged in order of frequency of use. As discussed above, Schein contains all limitations of claim 11, but fails to teach the limitations of claim 18. However, within the same field of endeavor, Lee et al discloses a system capable of storing keywords and ranking them based upon their frequency of use. (Col. 5, Ln. 8-16 ; Col. 15, Ln. 10-64 ; Fig. 18). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of Schein with the keyword storage capability of Lee et al in order to provide the user with a more efficient searching system.

7.   Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein.

Applicant's claim 21 recites the EPG system of claim 11, wherein the program information includes data relevant to place names. As discussed above, Schein contains all limitations of claim 1. Specifically, Schein discloses a method of searching an EPG database (Col. 1, Ln. 49-56), wherein, via an interface, a user can enter certain attributes (i.e., keywords) (Col. 2, Ln. 18-23), which retrieve information _relevant_ to the entered keyword from the EPG database. (Col. 12, Ln. 66-67 thru Col. 13, Ln. 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data. (Col. 13, Ln. 33-48). But, Schein fails to specifically disclose whether the program information retrieved can be relevant to place names. However, since Schein's system can retrieve any information contained on the database which is relevant to the keyword, it would have been obvious that this information could contain data relevant to place names if the user entered a keyword related to a place name. For example, if a

user enters "Cowboys" as a keyword, Schein's system would likely retrieve a Dallas Cowboys football game to be played in Texas. Or, if a user were to input "geographic", Schein's system would likely retrieve any programs listed on the geography channel, some of which would be relevant to place names. In essence, would have been obvious that Schein's system could retrieve data relevant to place names because it is highly likely various programs listed on the database are related to or contain place names. Thus, Schein contains all limitations of applicant's claim 21.

Although claim 22 does not correspond to claim 21, it is analyzed and rejected accordingly because it contains the same elemental structure.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Rothmuller (US #5,635,989) discloses a method and apparatus for sorting and searching a television program guide.

b. McClard (US #6,438,752) discloses a method and system for selecting television programs based on the past selection history of an identified user.

c. Legall et al (US #6,005,565) disclose an integrated searching EPG guide for various programming resources

d. Burns et al (US #5,454,106) disclose a database retrieval system utilizing natural language to present understood components of an ambiguous search query.

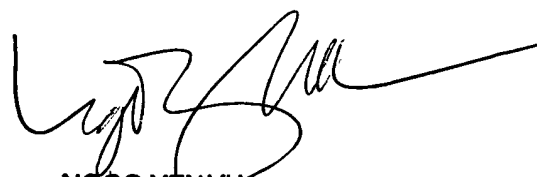e. Pederson et al (US #5,278,980) disclose an information retrieval system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (703)308-6107. The examiner can normally be reached on Mon. 7:30am-3pm, Tues.-Fri. 7:30-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703)305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Initials 𝒥𝒱
December 10, 2004.

NGOC-YEN VU
PRIMARY EXAMINER